

MASLENNIKOV, Ye.P.; GOROZHANINOV, N.Ye.

Continuous rails for cranes with elastic fastening. *Biul.tekh.-*  
*ekon.inform. no.1:71-73 '59.* (MIRA 12:2)  
(Cranes, derricks, etc.)

VRAGOV, Yu.D.; ~~MAKSHIN~~ BURNIKOV, Ya.V.; LAPIN, Yu.E.

Dynamics of a high-speed differential drive. Stan. 1 instr.  
36 no.6:12-15 Je '65. (MIRA 18:8)

MASLENNIKOV, Ye.V.

Efficient utilization of working time in machine shops.

Mashinostroitel' no. 2:43-45 F '61.

(MIRA 14:2)

(Factory management)

MASLENNIKOV, Yu., inzh.

Improving the heater of the "Volga" automobile. Avt.transp. 40  
no.10:53 0 '62. (MIRA 15:11)  
(Automobiles)

MASLENNIKOV, Yu.I.

Preliminary stabilization of nylon yarn produced with the simplified  
method directly on the automatic circular hosiery machine. Lab. prom.  
no. 2153-54 Ap-Je '65. (MIRA 18:10)

MASLENNIKOVA, A.A.

SUBJECT USSR / PHYSICS CARD 1 / 2 PA - 1690  
AUTHOR REJTLINGER, S.A., MASLENNIKOVA, A.A., JARCHOW, I.S.  
TITLE The Gas-Penetrability of Polyorganosiloxan Rubber.  
PERIODICAL Zurn.techn.fis, fasc.11, 26, 2553-2557 (1956)  
Issued: 12 / 1956

Here the dependence of this type of rubber on composition, on the vulcanizing method, and on temperature is studied.

Investigation method: Dimethyl polysiloxane (caoutchouc SKT) served as initial polymer. To 100 units of weight of this caoutchouc 3 units of benzoyl peroxide and 5 units of zinc oxide are added for the purpose of vulcanization. In some cases white soot or titanium dioxide was introduced as filling material. The device for the determination of gas penetrability consisted of 2 steel chambers between which the plate-shaped samples to be examined were pressed. Before measuring, both chambers were evacuated to  $10^{-3}$  mm torr, after which the upper chamber was connected with the gas. The gas diffuses through the plate to be examined into the lower chamber which is connected with a mercury manometer.

Test results: The values found for the constant P of gas penetrability, for the diffusion constant D, and for the solubility constant  $\sigma$  are shown together in a table. Investigations extended to unfilled vulcanization products of dimethylpolysiloxane and natural caoutchouc. The rubbers examined have a very high degree of gas penetrability which by far exceeds that of other molecular compounds. The increase of the gas penetrability of dimethylpolysiloxane as against that of natural caoutchouc is a consequence of the considerable in-

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Zurn.techn.fis,26,fasc.11, 2553-2557 (1956) CARD 2 / 2

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crease of the diffusion velocity of gases. Vulcanization in an oven or a thermostat diminishes gas penetrability considerably, but vulcanization in a press entails no considerable modification of gas penetrability. The gas penetrability of dimethylpolysiloxanes can be somewhat reduced by the introduction of filling materials. Active filling materials (white soot) are more effective than inactive ones (titanium dioxide). With rising temperature the penetrability for  $H_2$ ,  $N_2$ ,  $O_2$  increases somewhat, but it diminishes for  $CO_2$ .

From the data obtained also the activation energy of the diffusion and the heat of solution of nitrogen in the polymer were computed.

Discussion of results: In some case the polyorganosiloxanes differ considerably from the caoutchoucs of the carbon type because of their particular molecular structure. The fact that specific weights are relatively low in spite of the presence of heavy Si-molecules is indicative of a loose packing of the molecules. They probably have a spiral structure. Penetration of gas occurs by a diffusionlike transfer of the molecularly dissolved gas but not by flows of the KNUDSEN or POISEVILLE type.

INSTITUTION:

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A051/A029

AUTHORS: Glupushkin, P.M., Maslennikova, A.A., Otopkova, M.A., Sidorov, A.I.

TITLE: Composition Development of Heat-Resistant Rubbers for Insulating  
Current-Conducting Cores in a Continuous Vulcanization Unit

PERIODICAL: Kauchuk i Rezina, 1960, No. 10, pp. 18-23.

TEXT: The authors describe the ANB(ANV)-continuous vulcanization unit used in the USSR to vulcanize the insulation of current-conducting cores (Fig.1). The vulcanization is completed in one technological stage by the following principle: from the drum fixed on the energy source (1) the current conductor reaches the head of the worm press (2) where the rubber insulation is applied. The design of the rectangular head of the worm press assures a minimum accumulation of the rubber mixture, in order to avoid its scorching. The concentricity of the rubber casing is accomplished by a hard centering of the mandrel's and matrix's position. The insulated conductor, from the head of the worm press directly reaches the vulcanization chamber (4). The vulcanization chamber is joined to the head of the worm press by means of an input or correcting device (3) made in the form of a telescope tube having a horizontal transmission. In stopping or fixing the unit of continuous vulcanization during its functioning

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the correcting device opens; during the work the device is fixed to the head of the worm press by means of a bayonet catch. The vulcanization chamber is a sectional pipe 60-75 m long. The vulcanization of the rubber casing takes place with the cable passing in the tube at a rate of 150-200 m/min. The vulcanization medium is saturated vapor with a pressure of 15-18 atm. In order to avoid condensation of the water vapor, the vulcanization chamber has an external heater in the form of a vapor sleeve or an induction heater. In order to prevent the vapor from entering from the vulcanization chamber into the cooling pipe, several rubber linings and a metal diaphragm are placed in the middle lock (5). The vulcanized cable is cooled with water in the pipe (6) under pressure of 6-8 atm to avoid the formation of pores in the insulation. At the end of the cooling pipe an exit lock is included (7). After the reversing wheel the cable passes through an open cooling vat 10-15 m long, a blowing device (9), traction device (11), an apparatus of dry testing (12), a compensator (13) and ends up at the double receiver (14). The units are usually supplied with two sources of energy in order to insulate two current-conductors simultaneously. A special device (10) is added to the unit for checking and regulating the thickness of the rubber casing. The insulating rubbers vulcaniz-

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ed in the ANV unit must possess in addition to the usual physico-mechanical and electrical properties according to OCT-2068-54 (GOST-2068-54), the following specifications: 1) good spraying properties insuring the required speed for sheathing the cable and forming a smooth surface of the casing, 2) the composition of the insulating rubber must insure the formation of a vulcanizate under conditions of a 12-25 sec duration of vulcanization and 180-200°C, having optimum characteristics without scorching of the rubber mixture at the temperature of its production and spraying; 3) the insulating casing must be sufficiently stable to deformations due to compression at temperatures of up to 200°C, in order to avoid the formation of dents and compression marks; 4) colored insulating rubber is used to differentiate between the different cores in the cable during repair and thus the colored rubber intended for sheathing the cores in the ANV unit must contain heat-resistant dyes. The composition of the insulating rubber used in the ANV unit must have a vulcanizing group which would insure a high rate of vulcanization of the rubber mixture at a temperature of the saturated vapor of 180-200°C without affecting the dielectric properties of the rubber and without causing corrosion of

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the non-tinplated copper conductor, both in the vulcanization process and during the working of the cables. It is pointed out that sulfur as the vulcanizing agent in the rubber previously used in the USSR even in quantities of 0.2 weight parts to 100 weight parts of rubber causes a noticeable corrosion of the copper conductor and lowers the heat-resistance of the rubber. Rubber with a low sulfur content has a more rapid drop of the relative elongation during heat aging than rubber containing thiuram as the vulcanizing agent (Fig. 2). In developing a composition of the rubber, the main properties taken into account were the technological properties of the mixture, the rate of vulcanization and the quality of the obtained vulcanizate. The TC III-35 (TSSh-35) rubber grade (35% raw rubber including 50% natural rubber and 50% СКБ-РД (SKB-RD) was used as the base of the non-sulfurous rubber composition containing thiuram as the vulcanizing agent. It was established that with 6.0 weight parts of thiuram to 100 weight parts of the rubber the required rate of vulcanization can be achieved for the insulating of conductors in the ANV unit. However, this rubber had poor thermal aging resistance and did not

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comply with the GOST-2068-54 standard as to its heat resistance. Nitro-compounds diazo-compounds, quinones and their derivatives, dithiomorpholine, triethanolamine, dithiocarbamates were tested as accelerators, whereby the dithiocarbamates proved to be the most suitable for the conditions of the ANV unit, particularly zimate (the zinc salt of dimethyldithiocarbamine acid). This accelerator increases the rate of vulcanization of thiuram rubber at 203°C and is safe in respect to scorching. Rubbers with zimate have good heat resistance and in their dielectric properties do not fall behind insulation rubbers used in the cable-manufacturing industry. The presence of glycerol also increased the rate of vulcanization but affected the dielectric properties of the rubber due to its hydrophilic nature. Various condensation resins were tested in the composition and it was found that the greatest effect was obtained from phenol-formaldehyde resins, which not only accelerate the vulcanization of the rubber but increase its heat resistance. The greater activity of the latter is thus explained by the presence of hydroxyl groups which have an activating effect on thiuram. The combined use of 1% phenol-formaldehyde resin and 8% gliftal' -1350 in the rubber lowers the fatigue of the rubber

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containing thiuram. Resin No. 18 was chosen as the most easily obtainable and odorless resin. In the final composition zimate, phenol-formaldehyde resin No. 18, gliftal resin No. 1350 and glycerol were used. A number of compositions of heat-resistant rubber were developed on this base not containing sulfur and to be used as insulating material for current-conductors in units of continuous vulcanization. An evaluation method was developed based on the deformation determination for temperatures of 150-200°C. There are 7 graphs, 1 diagram and 6 English references.

ASSOCIATION: Nauchno-issledovatel'skiy institut kabel'noy promyshlennosti (Scientific Research Institute of the Cable Industry).

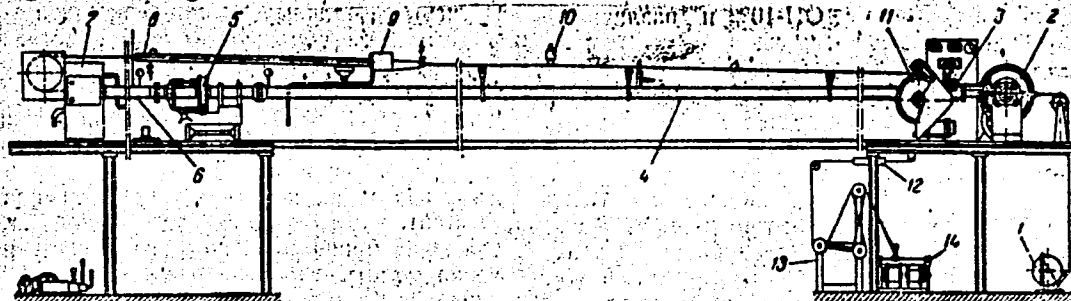
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AO51/A029

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Fig. 1 - Diagram of the unit of continuous vulcanization



1-energy source, 2-worm press, 3-input or correcting device, 4-vulcanization chamber, 5-middle lock, 6-cooling pipe for the vulcanized cable, 7-output lock, 8-open cooling vat, 9-blowing device, 10-instrument for controlling and regulating the thickness of the rubber casing, 11-traction device, 12-dry testing apparatus, 13-compensator, 14-doubled receiver.

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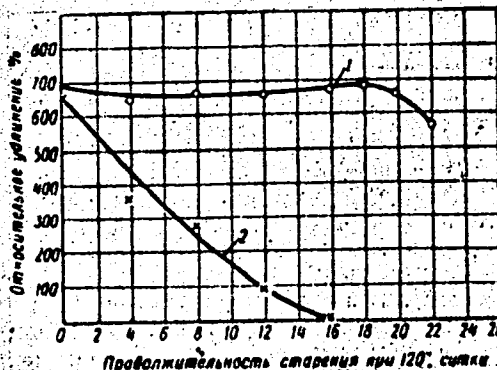
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Composition Development of Heat-Resistant Rubbers for Insulating Current-Conducting Cores in a Continuous Vulcanization Unit

Fig. 2

relative elongation, %



Relationship of the relative elongation of the rubber to the heat aging duration at 120°C.

1-thiuram rubber, 2-low-sulfur rubber

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ACCESSION NR: AT4033532

S/0000/63/000/000/0162/0160

AUTHOR: Nefedova, I. D. (Candidate of chemical sciences); Somova, A. A.;  
Maslennikova, A. A.

TITLE: Stainless steel for equipment producing caprolactam by air oxidation of cyclohexane

SOURCE: Poluprodukty\*diya sinteza poliamidov (Intermediates for polyamide synthesis).  
Moscow, Goskhimizdat, 1963, 162-169

TOPIC TAGS: stainless steel, steel corrosion resistance, caprolactam, adipic acid, cyclohexane, cyclohexane air oxidation, caprolactam production, adipic acid production, cyclohexane oxidation equipment

ABSTRACT: Samples of ten stainless steels (designations and chemical composition given) were tested for effects of corrosive environments present in the reactor, separator, filter, distillation column, reservoir and sedimentation tank of a plant producing caprolactam and adipic acid by air oxidation of cyclohexane. Temperatures ranged from 140C to room temperature, pressures from 0 to 18 atm., exposures from 784 to 849 hours. Analysis of the results, expressed in terms of corrosion rates and presented graphically and in tabular form, indicates that Mo alloyed steels are best suited for the

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basic separator components of a plant. Steels containing 0.03 to 0.04% and the Nb alloyed steel Kh19N14B exhibited best corrosion resistance in the principal components of a plant producing adipic acid. Orig. art. has: 3 tables and 3 graphs.

ASSOCIATION: None

SUBMITTED: 12Oct63

DATE ACQ: 06Apr64

ENCL: 00

SUB CODE: MM, CC

NO REF SOV: 000

OTHER: 000

Card 2/2

24819

S/081/61/000/011/015/040

B105/B203

53400

AUTHORS: Kupin, B. S., Petrov, A. A., Yakovleva, T. V., Maslennikova, A. G.

TITLE: Direction of hydration of asymmetrical disubstituted acetylenes

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 11, 1961, 178-179, abstract 11448 (Tr. Leningr. tekhnol. in-ta im. Lensoveta, 1960, vyp. 60, 63-69)

TEXT: The authors studied the addition of water under the conditions of Kucherov's reaction on  $\text{CH}_3\text{C} \equiv \text{CR}$  (I), where (a)  $\text{R} = \text{C}_2\text{H}_5$ , (b)  $\text{R} = \text{C}_3\text{H}_7$ , (c)  $\text{R} = (\text{CH}_3)_2\text{CH}$ , (d)  $\text{R} = (\text{CH}_3)_3\text{C}$ . A noticeable orienting effect is only observed in case (I d) (65% ethyl-tert.-butyl ketone and 35% methyl neopentyl ketone). The other hydrocarbons give mixtures of all possible ketones at about equal ratios. The ketone mixtures were analyzed by comparing their infrared spectra with spectra of mixtures of known composition. The maximum error of this method is  $\sim 2-3\%$ . It was found that the order of addition of water to disubstituted acetylenes is determined by

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Direction of hydration of asymmetrical ...

at least two factors acting in opposite directions: by the polarization due to  $\sigma, \pi$ -coupling of the acetylene bond and due to induction polarization. The effect of steric factors is possible. (I a) was obtained by the effect of  $\text{NaNH}_2$  and, afterwards, of the ethyl bromide on  $\text{CH}_3\text{C} \equiv \text{CH}$  in liquid  $\text{NH}_3$ .

A mixture of 12 g of (I a), 4 g of  $\text{HgO}$ , 5 g of  $\text{Fe}_2(\text{SO}_4)_3$ , and 250 ml of 10%  $\text{H}_2\text{SO}_4$  was stirred for 5 hr, saturated with  $(\text{NH}_4)_2\text{SO}_4$ , and 8.2 g of the ketone mixture was obtained (boiling point  $101-101.5^\circ\text{C}$ ,  $n_D^{20}$  1.3920,  $d_4^{20}$  0.8096). By means of hydration of (I b) (20 g) (obtained from  $\text{C}_3\text{H}_7\text{C} \equiv \text{CNa}$  and  $\text{CH}_3\text{Br}$  in liquid  $\text{NH}_3$ ), 15 g of ketone mixture were obtained (boiling point  $123.5-124.5^\circ\text{C}$ ,  $n_D^{20}$  1.4020,  $d_4^{20}$  0.8133). The hydration of 5 g of (I c) (synthesized from  $\text{CH}_3\text{I}$  and  $(\text{CH}_3)_2\text{CH}-\text{C} \equiv \text{CH}$ , the latter obtained from  $(\text{CH}_3)_2\text{CHCH}_2\text{CHO}$  by action of  $\text{PCl}_5$  with subsequent separation of  $\text{HCl}$  by means of alcoholic alkali solution at  $140-150^\circ\text{C}$ ) yields 2.8 g of ketone mixture (boiling point  $114-115^\circ\text{C}$ ,  $n_D^{20}$  1.3972,  $d_4^{20}$  0.8020). To the solution of

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Direction of hydration of asymmetrical ...

4.5 g of HgO in 260 ml of 14%  $\text{H}_2\text{SO}_4$ , 11 g of (I d) (obtained from tert.-butyl acetylene) were added at  $60^\circ\text{C}$ ; 7.5 g of the ketone mixture were obtained after 6 hr (boiling point  $124-125^\circ\text{C}$ ,  $n_D^{20}$  1.4057,  $d_4^{20}$  0.8405).

The R structure affects the order of addition of water; in the series  $\text{C}_2\text{H}_5$ ,  $\text{CH}(\text{CH}_3)_2$ , and  $\text{C}(\text{CH}_3)_3$ , a change in the order of addition is not observed in the same direction. [Abstracter's note: Complete translation.]

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S/051/61/010/001/014/017  
E201/E491

AUTHORS: Yakovleva, T.V., Maslennikova, A.G. and Petrov, A.A.

TITLE: The Effect of the Nature of the Solvent on the Profile of the Carbonyl-Group Band in the Infrared Spectra of Carbonyl Compounds

PERIODICAL: Optika i spektroskopiya, 1961, Vol.10, No.1, pp.131-133

TEXT: The band representing the valence vibrations of the carbonyl group in the infrared and Raman spectra is known to consist of at least two components (Ref. 1 to 6). The splitting of the band is most likely due to association. It was found that solvents can be divided into three groups depending on the nature of their effect on the carbonyl-group band profile. Solvents of the first type (polar compounds, nitromethane, chloroform, alcohols, toluene) produce only one carbonyl-band component (the one with the lower frequency) in dilute solutions. In solvents of the second type (carbon tetrachloride, hydrogen sulphide, benzene) both components of the carbonyl band can be seen. In solvents of the third type (non-polar compounds such as hexane, octane, cyclohexane) only the component with the higher

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S/051/61/010/001/014/017  
E201/E491

The Effect of the Nature of the Solvent on the Profile of the  
Carbonyl-Group Band in the Infrared Spectra of Carbonyl Compounds

frequency appears in the spectra. This is illustrated in  
Table 1 and in a figure on p.131 for acetone, methyl ethyl ketone,  
methyl propyl ketone, diethyl ketone, pinacolin, cyclohexanone,  
acetophenone and benzophenone dissolved in various solvents. The  
change in the solution concentration with simultaneous proportional  
change of the layer thickness (so that the same number of molecules  
remained in the ray path) did not affect the carbonyl band profile  
(Table 2). There are 1 figure, 2 tables and 14 references:  
2 Soviet and 12 non-Soviet. ✓

SUBMITTED: April 12, 1960

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SHAPIRO, Ya.Ye.; MILOSLAVSKIY, Ya.M.; CHERNYSHEVA, M.I.; MASLENNIKOVA,  
A.I.; TYUNINA, Ye.A.

Treatment of patients with relapsing rheumocarditis by means of  
inductothermy (shortwave diathermy) in the adrenal region in  
combination with salicylates. Vop. kur., fizioter. i lech. fiz.  
kul't. 25 no. 6:508-513 N-P '60. (MIRA 14:2)

1. Iz fakul'tetskoy terapevticheskoy kliniki (zav. - prof. Ya.Ye.  
Shapiro) Ryazanskogo meditsinskogo instituta imeni akademika  
I.P. Pavlova.

(RHEUMATIC HEART DISEASE) (DIATHERMY)  
(SALICYLATES—THERAPEUTIC USE)

ARDAMATSKIY, N.A.; LIKHVANTSEV, V.A.; MASLENNIKOVA, A.I.; TYUNINA, Ye.A.

Functional indices of the adrenal cortex before and after administration of ACTH in some internal diseases. Vrach. delo no.4: 140 Ap'63. (MIRA 16:7)

1. Kafedra fakul'tetskoy terapii (ispolnyayushchiy obyazannosti zav.-dotsent N.A.Ardamatskiy) Ryazanskogo meditsinskogo instituta.  
(ADRENAL CORTEX) (ACTH)



MILOSLAVSKIY, Ya.I.; ARDAMATSKIY, N.A.; IVANOV, Yu.V.; LIKHVANTSEV,  
V.A.; LEKUN, A.M.; MASLENNIKOVA, A.I.; CHERNYSHEVA, M.I.;  
TYUNINA, Ye.A.; SHOLOKHOVA, G.I. (Ryazan')

Urinary excretion of 17-ketosteroids and 17-hydroxy  
corticosteroids in healthy people. Probl. endok. i gorm. 9  
no.3:76-80 My-Je '63. (MIRA 17:1)

1. Iz kafedry fakul'tetskoy terapii (ispolnyayushchiy  
obyazannosti zaveduyushchego - dotsent N.A. Ardamatskiy)  
Ryazanskogo meditsinskogo instituta imeni I.P. Pavlova.

MEKLER, A.S.; MASLENNIKOVA, A.M.; DOROFYEV, Ye.I.

Developing and introducing electronic level indicator signals  
for foundry sand preparation departments. Lit.proizv. no.9:21-  
22 S '62. (MIRA 15:11)  
(Sand, Foundry) (Electronic instruments)

**MASLENNIKOVA, A.P., inzhener-tekhnolog.**

**Improving the quality of grits. Standartizatsiia No.6:58-60 H-D  
'55. (MLRA 9:2)**

**1.Ministerstvo tovgovli SSSR.  
(Grain--Quality control)**

MASLENNIKOVA, A.P., inzhener-tekhnolog.

Ways of improving the bread-baking qualities of wheat. Standartizatsiya  
no.3:47-50 My-Je '56. (MLRA 9:9)

1. Ministerstvo tovgovli SSSR.  
(Wheat--Standards)

MASLENNIKOVA, A.P.; inzhener.

Specifying bread standards and methods for testing bread. Standartizatsia, no.5:76-77 8-0 '56. (MLRA 10:1)  
(Bread--Standards)

MASLENNIKOVA, A.<sup>P.</sup> inzhener-tekhnolog.

Improve the quality of groats. Muk.-elev.prom. 23 no.3:  
13-15 Mr '57. (MLRA 10:5)

1. Ministerstvo trgovli SSSR.  
(Meal)

MASLENNIKOVA, A., inzh.-tekhnolog;

Increase the production and improve the quality of oatmeal.  
Muk.-elev.prom. 25 no.9:25-26 S '59. (MIRA 12:12)

1. Upravleniye trgovli Ministerstva trgovli RSFSR.  
(Oatmeal)

SALUN, I., kand.tekhn.nauk; MASLENNIKOVA, A., inzh.

Expand the assortment and improve the quality of groats. Muk.-  
elev. prom. 28 no.5:27-28 My '62. (MIRA 15:5)

1. Institut narodnogo khozyaystva im. Plekhanova (for Salun).
2. Upravleniye trgovli khleboproduktami Ministerstva trgovli  
RSFSR (for Maslennikova).

(Cereal products)



GORUN, Ye.G.; MASLENNIKOVA, A.P.

Manufacture of wheat and corn flour mixes for pancakes. Kons. i  
ov.prom. 18 no.5:24 My '63. (MIRA 16:4)

1. Tsentral'nyy nauchno-issledovatel'skiy institut konservnoy  
i ovoshchesushil'noy promyshlennosti (for Gorun). 2. Upravleniye  
torgovli khleboproduktami Ministerstva torgovali RSFSR (for  
Maslennikova).

(Food, Concentrated)



MASLENNIKOVA, A.S.

5(2); 21(5) FRAME 1 BOOK EXTENTATION 207/1900  
 Annotatsiya knazh 2222. Knazhatsiya po analiticheskoj khimii  
 Prikladnaya radioaktivnykh izotopov v analiticheskoj khimii  
 (Use of Radioactive Isotopes in Analytical Chemistry) Moscow  
 Izdatel'stvo Khim., 1958. 368 p. [Series: Khim. Trudy, t. 9 (12)]  
 Bravda clip inserted. 3,000 copies printed.

Resp. Ed.: I.P. Alimova, Corresponding Member, USSR Academy  
 of Sciences; Ed. of Publishing House: A.M. Yermakov; Tech.  
 Ed.: G.V. Polyakova.

PURPOSE: The book is intended for chemists and chemical  
 engineers concerned with work in analytical chemistry.

CONTENTS: The book is a collection of the principal papers  
 published in Russia at the Second Conference on the Use of  
 Radioactive Isotopes in Analytical Chemistry. The problems discussed at the  
 conference included separation, detection, stability and solubility  
 of precipitates, determination of the instability constants

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of complex compounds, separation of rare earth metals, and  
 ion-exchange chromatography. No personalities are mentioned.  
 There are 351 references, 175 of which are Soviet, 33 German,  
 19 French, 8 Swedish, 2 Hungarian, and 2 Czech.

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MASLENNIKOVA, A.S.

AUTHORS: Nikolayev, A. V., Sorokina, A. A., Maslennikova, A.S 78-1-29/43TITLE: Cerium Extraction with Tributyl-Phosphate  
(Ekstraktsiya tseriya tributilfosfatom).PERIODICAL: Zhurnal Neorganicheskoy Khimii, 1958, Vol. 3, Nr 1,  
pp. 160-164 (USSR)

ABSTRACT: After a short survey on respective literature (ref. 1-6) the authors state that diethylether is by far the best extractor (table 1). All extractors (with the exception of nitromethane) are explosive under the conditions of strong acidity. The acidity can be reduced to a great extent by salting out (table 2). The strong increase of extraction with the increase of acidity permits the conclusion that cerium-IV is extracted as a complex of the  $H_2/Ce(NO_3)_6$  type. Cerium is precipitated from the ether phase with ammonium; the yield is about 90%. In the place of ammonia also hydrogen peroxide or other reducing substances can be used for extraction. In an  $HNO_3$  milieu the reduction is made more difficult but it acquires a certain specific character (table 8). Subsequently, instructions are given for the production of pure 4-valent cerium as well as for its production from raw materials with a content of rare earths.  $Ce^{144}$  -  $Pr^{144}$  were used as radioactive indicators.

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## Cerium Extraction with Tributyl-Phosphate.

78-1-29/43

From tables 3 and 4 it can be seen that rare earths did not have any salting out effect in the cerium-IV extraction with TBPh (ref. 8). An uncomplete extraction is not determined by the reduction of thorium but by its balanced distribution. The radioactive marking made possible the determination of the fact, that the reduced extraction from concentrated  $\text{HNO}_3$  depends to a great extent on the reduction of cerium-IV as well as on the highly balanced solubility, compared with diluted acids (tables 6-8). The oxidizability of TBPh is greater during its first contact with cerium-IV (some additions are oxidized). Then the oxidizability decreases to a tolerable extent (table 7). In the water phase there is after the 1st extraction about  $1/3$  of the cerium-IV present, the rest consists of cerium III. A worked out method of production for cerium from the raw material is described. Monazite residue or loparit cinders serve as such. Table 9 shows that the yield of cerium in the extract can be increased to from 93-95% by re-using the rinsing water and by a reduction of the number of washings. By means of an addition of  $\text{KBrO}_3$  during the extraction the yield can be increased to from 96-98%. Praseodymium under the given conditions does not at all pass over to the organic phase. In the water phase there remains only its

Card 2/3

Cerium Extraction with Tributyl-Phosphate.

78-1-29/43

radioactive isotope  $\text{Pr}^{144}$ . The activity of the water phase is therefore initially high decreases, however, after from 3-4 hours ( $T_{1/2} = 17,4$  minutes). There remains only a quantity of  $\text{Pr}^{144}$  equivalent to  $\text{Ce}^{144}$  (table 10). In table 7 and others the balanced activity regarding  $\text{Ce}^{144}$  and  $\text{Pr}^{144}$  is mentioned. There are 10 tables and 6 references, 2 of which are Slavic.

ASSOCIATION: Chair of Radiochemistry, Moscow Institute of Non-Ferrous Metals and Gold im. M. I. Kalinin (Kafedra radio-khimii Moskovskogo instituta tsvetnykh metallov i zolota imeni M. I. Kalinina).

SUBMITTED: June 18, 1957

AVAILABLE: Library of Congress

Card 3/3

LAYNER, A.I.; KOLENKOVA, M.A.; MASLENNIKOVA, A.S.

Investigating the process of treating leucite for alumina and  
caustic potash. Sbor. nauch. trud. GINTSVETMET no.33:143-151  
'60. (MIRA 15:3)

(Leucite) (Alumina)

ACC NR: AP6007909 EWT(m)/EWP(t) IJP(c) JD/HW/JG  
SOURCE CODE: UR/0149/66/000/001/0148/0152

AUTHOR: Bakhvalov, G. T.; Layner, V. I.; Maslennikova, A. S.

ORG: Moscow Steel and Alloys Institute. Department of Metal Corrosion (Moskovskiy institut stal i splavov. Kafedra korrozii metallov)

TITLE: Heavy platinum plating of nickel and molybdenum

SOURCE: IVUZ. Tavetnaya metallurgiya, no. 1, 1966, 148-152

TOPIC TAGS: platinum plating, nickel platinum plating, molybdenum platinum plating

ABSTRACT: Conditions of electroplating nickel and molybdenum with platinum to protect the former against gas corrosion at 600—800C or aggressive chemical media has been studied. The strongest bond between platinum and nickel was obtained when the nickel was thoroughly degreased and when the electro-deposition of platinum was performed with periodic reversal of current. Electrolysis without current reversal yielded coatings which were porous at thicknesses over 30  $\mu$ . Coatings obtained with reversed current with a cathodic and anodic period of 10 and 1.5 sec or 5 and 1.5 sec were 28 or 26  $\mu$  thick, and had no porosity. Platinum-plated nickel specimens were tested at 650C for 50 hr. Specimens which had a platinum layer at least 28  $\mu$  thick retained a strong bond between platinum and nickel. A strong bond between molybdenum

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L 21544-66

ACC NR: AP6007909

0

and platinum could not be achieved. Therefore, molybdenum was first chromium plated, then nickel plated, and then platinum plated. The three-layer plating protected molybdenum against oxidation at temperatures up to 800C for up to 15 hr. Orig. art. has: 2 figures. [AZ]

SUB CODE: 11, 13/ SUBM DATE: 29Jun64/ ORIG REF: 002/ OTH REF: 004/ ATD PRESS:

4219

Cord 2/2 BLC

L 12875-63 EWA(n)/EWT(1)/EWI(q)/EWT(m)/BDS AFFTC/ASD WH/JD/JW/JG  
 ACCESSION NR: AP3002937 8/0016/63/031/006/1362/1368

AUTHOR: Golubev, Yu. M.; Kozlovskaya, T. M.; Maslennikova, E. G.

TITLE: Heats of formation and heat capacities of the system Mn-Si

SOURCE: Zhurnal fizicheskoy khimii, v. 37, no. 6, 1963, 1362-1368

TOPIC TAGS: formation heat, heat capacity, Mn-Si system, manganese silicide, Mn sub 3 Si, Mn sub 5 Si sub 3, MnSi sub 2, covalent bond

ABSTRACT: The standard heats of formation at 25C of the manganese silicides Mn sub 3 Si, Mn sub 5 Si sub 3, MnSi and a phase close to MnSi sub 2 were determined by combustion and dissolution method. The heat capacities of the silicides over the range 300-1100C were determined by the method of mixing in a massive copper calorimeter; equations for their temperature dependence were derived. The covalent character of the Mn-Si chemical bonds is discussed. "We express thanks to H. V. Ageyev, corresponding member of the AN SSSR, for valuable advice and help in the organization of the present work." "X-ray studies of the manganese silicide compounds were carried out by O. G. Karpinskiy." Orig. art. has: 5 figures, 2 tables, 5 equations.

Association: Metallurgical Inst.

Card 1/2

DURNOV, V.K.; BABUSHKIN, N.M.; PUSHKASH, I.I.; Prinimali uchastiye:  
KOLMOGOROV, A.V.; KLEPTSIN, V.G.; MASLENNIKOVA, E.G.;  
GORYACHEVA, A.V.; BARAKHVESTOV, V.S.; RASIN, B.S.; ZEMLYAKOV,  
A.A.; BABOSHINA, G.V.

Distribution of the temperature of the hot blast in the  
tuyere passage of the blast furnace. Stal' 25 no.3:205-209  
Mr '65. (MIRA 18:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metallurg-  
icheskoy teplotekhniki i Nizhne-Tagil'skiy metallurgicheskiy  
kombinat (for Durnov, Babushkin, Pushkash).

35008-00 (K)/TIN/LE(01)/TIL/TTI IPI(c) 12/12/65

ACC NR: AP6014900 (A) SOURCE CODE: UR/0076/65/039/012/3102/3105

AUTHOR: Golutvin, Yu. M.; Maslennikova, E. G.

ORG: Institute of Metallurgy, AN SSSR, im. A. A. Baykov (Institut metallurgii AN SSSR)

52  
B

TITLE: Heats of formation of zirconium silicides

SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 12, 1965, 3102-3105

TOPIC TAGS: heat of formation, zirconium compound, silicide

ABSTRACT: The article describes the results of measurements of the heats of formation of zirconium silicides by the method of solution in a mixture of hydrofluoric and sulfuric acids in a calorimeter with a platinum reactor. Starting materials were zirconium powder with a purity of 99.7% and silicon powder made from high purity monocrystalline silicon (99.999%). The mixture of zirconium and silicon powders was pressed into tablets and melted in beryllium oxide crucibles in an argon atmosphere in an induction furnace and in a resistance furnace with a tungsten heater. Measurements were made of the heats of formation of the following compounds: metallic Zr;  $Zr_2Si$ ;  $Zr_5Si_2$ ;  $Zr_6Si_5$ ;  $ZrSi$ ;  $ZrSi_2$ . The results are given in a table. The following values were

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UDC: 541.11

L 35808-66

ACC NR: AP6014900

obtained for the heats of formation ( $\Delta H^\circ$ ):  $Zr_2Si_{1.62}^{298.1} - 81 \pm 3$ ;  
 $Zr_5Si_{1.3} - 216 \pm 8$ ;  $Zr_6Si_{1.5} - 253 \pm 11$ ;  $ZrSi_{1.62} - 47 \pm 3$ ;  
 kcal/mole. Orig. aft. has: 1 figure and 1 table.

SUB CODE: 07/ SUBM DATE: 17Dec64/ ORIG REF: 010/ OTH REF: 008

Card 2/2

KANDAUROVA, G.S.; SHUR, Ya.S.; MASLENNIKOVA, F.V.

Dependence of the magnetic structure of a cobalt crystal on its  
size. Zhur. eksp. i teor. fiz. 38 no.1:60-63 Jan '60.  
(MIRA 14:9)

1. Ural'skiy gosudarstvennyy universitet.  
(Cobalt crystals--Magnetic properties)

MASLENNIKOVA, G. M.

Demidova, P. N.; MASLENNIKOVA, G. M.; and Kachanova, Ye. V.

"Morphology of the Blood in Burns," Khirurgiya, pp 22-26, No 4, 1949  
Leningrad Sci. Res. Inst. of First Aid.

Translation M-420, 6 May 55

*MASLENNIKOVA, G. N.*

USSR/Chemical Technology. Chemical Products and Their Application -- Silicates.  
Glass. Ceramics. Binders, I-9

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 5151

Author: Tumanov, S. G., Maslennikova, G. N.

Institution: Academy of Sciences USSR

Title: Thermal Analysis as a Method for the Determination of the Degree of  
Kaolinization of Spodumene

Original

Publication: Dokl. AN SSSR, 1956, 107, No 1, 119-121

Abstract: Thermal analysis of 3 specimens of spodumene (S) of different degree  
of disintegration, has revealed that on alteration of S the degree  
of its kaolinization increases. Chemical analyses and determinations  
of the specific gravity, have shown that with increasing extent of  
S changes the content of  $\text{Na}_2\text{O}$  increases and that of  $\text{Li}_2\text{O}$  decreases;  
losses on calcining become greater; specific gravity decreases.

Card 1/1

*State Research Electros-Ceramics Inst.*



TUMANOV, S.G., doktor tekhn.nauk; VORONKOV, G.N., kand.tekhn.nauk;  
MASLENNIKOVA, G.N., kand.tekhn.nauk; TITOVA, V.G., inzh.

Zirconium porcelain. Trudy GIEKI no.2:14-20 '57. (MIRA 11:7)  
(Porcelain) (Zirconium)

TUMANOV, S.G., doktor tekhn.nauk; MASLENNIKOVA, G.N., kand.tekhn.nauk

Investigating ceramic materials on the basis of spodumene.  
Trudy GIKKI no.2:83-92 '57. (MIRA 11:7)  
(Ceramic materials) (Spodumene)

VORONKOV, G.N., kand.tekhn.nauk; ~~MASLENNIKOVA, G.N.,~~ kand.tekhn.nauk;  
BUCHENKOVA, A.F., inzh.

Effect of the mineralogical composition of the body on the mechanical strength of high-voltage porcelain. Trudy GIEKI no.4:17-25  
'60. (MIRA 15:1)

(Ceramic materials--Analysis)  
(Electric insulators and insulation)

MASLENNIKOVA, G.N., kand.tekhn.nauk; EUCHENKOVA, A.F., inzh.

Alumina-base ceramic materials for making a grinding medium. Trudy  
GIEKI no.4:25-34 '60. (MIRA 15:1)  
(Ceramic metals) (Crushing machinery)

BARASHENKOV, G.I., kand.tekhn.nauk; MASLENNIKOVA, G.N., kand.tekhn.nauk

Production of porcelain for use in electric engineering in the  
Rumanian People's Republic. Trudy GIEKI no.4:128-133 '60.  
(MIRA 15:1)

(Rumania--Ceramic materials)  
(Electric insulators and insualtion)

62320

S/063/60/005/002/003/006  
A003/A001

15.2/30  
AUTHORS:

Barashenkov, G. I., Maslennikova, G. N., Candidates of Technical Sciences

TITLE:

Achievements in the Field of High-Voltage Ceramic Materials and the Technology of Insulator Production

PERIODICAL:

Zhurnal vsesoyuznogo khimicheskogo obshchestva im. D. I. Mendeleyeva, 1960, Vol. 5, No. 2, pp. 168-172

TEXT:

The electrification of the USSR necessitates the development of insulators for a voltage of up to 750-800 kv. The metal consumption for masts in electric power lines must be reduced. It is necessary, therefore, to decrease the size of insulators, at the same time improving their mechanical properties. It is evident that the properties of insulators are determined by their phase composition. The introduction of new crystalline phases, e. g.,  $\alpha$ -alumina, zircon, etc, and also a considerable increase of the crystalline phase improves the mechanical resistance of the material. A corundum-mullite porcelain of the KM-1 (KM-1) type was developed on the base of commercial burnt alumina, Chasov-Yar clay, Prosyanovo kaolin and carbonates of barium, strontium and calcium. The

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82320

S/063/60/005/002/003/006  
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Achievements in the Field of High-Voltage Ceramic Materials and the Technology of Insulator Production

МГ-12 (MG-12) alumina porcelain was developed on the base of commercial burnt alumina, Chasov-Yar clay, Prosyantovo kaolin and pegmatite. An increase in the quartz content of the porcelain masses leads to an increase in the mechanical resistance of porcelain. Additions of alumina in the amount of 3-12% showed that the maximum increase in resistance at static bending of up to 1,200-1,300 kg/cm<sup>2</sup> in MG-12 is obtained with 12% alumina. The elasticity module reached a maximum with  $1.030 \cdot 10^6$  kg/cm<sup>2</sup> in this case. The mullite porcelain K-21 (K-21) is characterized by a homogeneous microstructure, and a high content of the crystalline phase (up to 60%). Ascharite porcelain is obtained by introducing ascharite ore into the charge. It is used in the manufacture of high-voltage insulators with a high mechanical resistance. Zircon porcelain is produced by substituting quartz in the composition of feldspar porcelain by zircon. It was shown that the properties of common electric porcelain can be improved by increasing the dispersion degree of quartz and feldspar in it. A higher degree of dispersion decreases the sintering temperature, increases the percentage of glass and the homogeneity of its structure, and increases the mechanical and

Card 2/3

82320

S/063/60/005/002/003/006  
A003/A001

Achievements in the Field of High-Voltage Ceramic Materials and the Technology of Insulator Production

electrical resistance. The grinding capacity of ball mills was increased by developing artificial ceramic balls. For this purpose two high-alumina ceramic materials were developed: M-13 (M-13) with 40% alumina, volumetric weight 2.9 g/cm<sup>3</sup> and burning temperature 1,380°C, and M-21 (M-21) with 70% alumina, volumetric weight 3.2 g/cm<sup>3</sup> and a burning temperature of 1,440°C. Another alumina material for grinding balls is "uralit" with a volumetric weight of 3.0. There is 1 table, and 19 references: 13 Soviet, 4 German and 2 American.

Card 3/3



BERGMAN, A.G.; MASLENNIKOVA, G.N.

Nondiagonal irreversible-reciprocal system consisting of cesium  
and lead chlorides and sulfates. Zhur.neorg.khim. 7 no.6:1382-  
1386 Je '62. (Systems (Chemistry)) (Fused salts) (MIRA 15:6)

S/078/62/007/006/015/024  
B119/B138

AUTHORS: Bukhalova, G. A., Maslennikova, G. N.

TITLE: Tetrahedral sections of the reciprocal quaternary system composed of the fluorides and chlorides of sodium, potassium, and calcium

PERIODICAL: Zhurnal neorganicheskoy khimii, v. 7, no. 6, 1962, 1408-1414

TEXT: Using the polythermal method the authors studied the systems  $\text{Na}_2\text{F}_2 - \text{K}_2\text{F}_2 \cdot 2\text{CaF}_2 - \text{K}_2\text{Cl}_2$  (1),  $\text{Na}_2\text{F}_2 - \text{CaF}_2 - \text{K}_2\text{Cl}_2$  (2),  $\text{Na}_2\text{Cl}_2 - \text{K}_2\text{Cl}_2 - \text{CaF}_2$  (3),  $\text{Na}_2\text{Cl}_2 - \text{K}_2\text{Cl}_2 - \text{CaF}_2 \cdot \text{CaCl}_2$  (4), and  $\text{Na}_2\text{Cl}_2 - \text{CaF}_2 \cdot \text{CaCl}_2 - \text{K}_2\text{Cl}_2 \cdot 2\text{CaCl}_2$  (5), all of which belong to the system  $\text{Na, K, Ca} \parallel \text{F, Cl}$  as tetrahedron-forming sections. Among the systems mentioned, 2 and 3 proved to be pseudoternary systems. A comparison of results has shown that the mixtures with the lowest melting points are within the tetrahedron  $\text{Na}_2\text{Cl}_2 - \text{K}_2\text{Cl}_2 \cdot 2\text{CaCl}_2 - \text{CaCl}_2$ . Section 1: monovariant points (in %-equiv) at 71%  $\text{K}_2\text{Cl}_2$ , 27%  $\text{Na}_2\text{F}_2$ , 2%  $\text{K}_2\text{F}_2 \cdot 2\text{CaF}_2$  (melting temperature ( $T_p$ ) 642°C)  
Card 1/2

Tetrahedral sections of the...

S/078/62/007/006/015/024  
B119/B138

and 43%  $\text{Na}_2\text{F}_2$ , 3%  $\text{K}_2\text{Cl}_2$ , 54%  $\text{K}_2\text{F}_2 \cdot 2\text{CaF}_2$  ( $F_p$  757°C). Section 2: eutectic point at 25%  $\text{Na}_2\text{F}_2$ , 74%  $\text{K}_2\text{Cl}_2$ , 1%  $\text{CaF}_2$  ( $F_p$  635°C). Section 4: lowest  $F_p$  at 648°C and 48.5%  $\text{Na}_2\text{Cl}_2$ , 48.5%  $\text{K}_2\text{Cl}_2$ , and 3%  $\text{CaF}_2 \cdot \text{CaCl}_2$ . Section 5: monovariant point at 28%  $\text{Na}_2\text{Cl}_2$ , 11%  $\text{CaF}_2 \cdot \text{CaCl}_2$ , 61%  $\text{K}_2\text{Cl}_2 \cdot 2\text{CaCl}_2$  ( $F_p$  530°C). The data of section 3 have been published earlier: G. A. Bukhalova, A. G. Bergman. Zh. prikl. khimii, 28, 1266 (1955). There are 8 figures and 1 table.

ASSOCIATION: Rostovskiy-na-Donu inzhenerno-stroitel'nyy institut, Kafedra khimii (Rostov-na-Donu Construction Engineering Institute, Department of Chemistry)

SUBMITTED: July 27, 1961

Card 2/2

40138

S/078/62/007/007/007/013  
B117/B101

1.2300

AUTHORS: Bukhalova, G. A., Maslennikova, G. N., Rabkin, D. M.

TITLE: Ternary reciprocal system of chlorides and hexafluoroaluminates of sodium and potassium

PERIODICAL: Zhurnal neorganicheskoy khimii, v. 7, no. 7, 1962, 1640 - 1643

TEXT: Components of the system  $\text{Na}^+$ ,  $\text{K}^+ \parallel \text{Cl}^-$ ,  $\text{AlF}_6^{3-}$  are used in the production of fluxes for welding aluminum and its alloys. This binary system was studied polythermally with the following results:  $\text{Na}_3\text{Cl}_3$ - $\text{Na}_3\text{AlF}_6$  has a eutectic at  $733^\circ\text{C}$  and 27%  $\text{Na}_3\text{AlF}_6$ .  $\text{K}_3\text{Cl}_3$  -  $\text{K}_3\text{AlF}_6$  has a eutectic at  $717^\circ\text{C}$  and 22%  $\text{K}_3\text{AlF}_6$ .  $\text{Na}_3\text{AlF}_6$  -  $\text{K}_3\text{AlF}_6$  forms continuous solid solutions with a eutectic at  $927^\circ\text{C}$  and 30%  $\text{K}_3\text{AlF}_6$ . Studies of 12 internal and 2 diagonal sections of the system showed the crystallization surface to consist of continuous solid solutions both of sodium and potassium hexafluoroaluminates and of sodium and potassium chlorides. The two regions are separated by a curve with a minimum at  $631^\circ\text{C}$  and 10.5%  $\text{Na}_3\text{AlF}_6$ , 50% Card 1/2

Ternary reciprocal system of...

S/078/62/007/007/013  
B117/B101

$K_2Cl_3$  and 39.5%  $Na_2Cl_3$ . The low heat effect of the exchange reaction (0.135 and 0.045 kcal/equ) proves the existence of a complete reciprocal exchange in melts. Hence it follows that potassium cryolite in molten state is also contained in a flux produced from sodium and potassium chlorides with sodium cryolite alone. The studies showed potassium cryolite to be very effective for welding Al and its alloys. The system examined has practical and scientific importance especially in the chemistry of aluminum salts in melts. There are 3 figures.

ASSOCIATION: Rostovskiy-na-Donu inzhenerno-stroitel'nyy institut  
(Rostov-na-Donu Construction Engineering Institute).  
Institut elektrosvarki im. Ye. O. Patona Akademii nauk USSR  
(Electric Welding Institute imeni Ye. O. Paton of the  
Academy of Sciences UkrSSR)

SUBMITTED: July 7, 1961

Card 2/2

BUKHALOVA, G.A.; MASLENNIKOVA, G.N.

Stable intersecting tetrahedron of the system  
 $\text{Na}^+, \text{K}^+, \text{Ca}^{2+}, \text{Ba}^{2+} \parallel \text{F}^-, \text{Cl}^-$ . Zhur.neorg.khim. 7  
no. 2619-2626 N 62. (MIRA 15:12)  
(Systems (Chemistry))  
(Fused salts)

MASLENNIKOVA, G.N.

Use of anorthosite in the production of porcelain for use in  
high-voltage installations. Stek. i ker. 19 no.8:24-27 Ag  
'62. (MIRA 15:9)  
(Anorthosite) (Electric insulators and insulation)

MASLENNIKOVA, G.N., kand.tekhn.nauk

Small-sized suspension insulators from aluminous porcelain. Vest.  
elektroprom. 33 no.3:76-77 Mr '62. (MIRA 15:3)  
(Electric insulators and insulation)  
(Electric lines--Overhead)



35621  
S/080/62/035/003/008/024  
D258/D302

15.2130  
AUTHOR: Maslennikova, G. N.

TITLE: Influence of degree of dispersion and of mineralogical composition on the elasticity moduli of porcelain

PERIODICAL: Zhurnal prikladnoy khimii, v. 35, no. 3, 1962, 520-523

TEXT: The resonance method was used for measuring the moduli of elasticity of porcelain bodies having various compositions and containing quartz of various grain sizes. A paste consisting of kaolin (28%), clay (18%), feldspar (33%) and sand (21%) was used for initial experiments. This paste was mixed with quartz of grain sizes ranging from  $3\mu$  to  $60\mu$ . The mixtures were fired at various temperatures, and their elasticity moduli determined afterwards. The elasticity at room temperature was found to decrease with increasing grain size; the modulus-temperature curves (up to  $1000^{\circ}\text{C}$ ) displayed a sudden increase in the range of  $500 - 600^{\circ}\text{C}$ . These jumps were more pronounced in the case of coarser grain size; this was explained in terms of a quartz-saturated glass formation, oc-

Card 1/3

Influence of degree ...

S/080/62/035/003/008/024  
D258/D302

curring in the temperature range of the sudden increase. The relationship between composition and modulus of elasticity was studied on 4 series of pastes, each of which was made rich in one component and poor in another, in comparison with the initial composition. The modulus-temperature curves of the resulting porcelain bodies showed that the modulus of elasticity increased along with increasing mechanical strength of the components. Also, the exclusion of quartz was shown to lead to a smoothing out of the sudden increase in the modulus-temperature curve. It was concluded that the mechanical strength of porcelain can be improved by a higher degree of dispersion and by choosing compositions so as to minimize the glass contents of the products. There are 3 figures, 3 tables and 8 references: 3 Soviet-bloc and 5 non-Soviet-bloc. The 4 most recent references to the English-language publications read as follows: S. Spinner, J. Am. Ceram. Soc., 3, 113, (1956); N. N. Ault and H. F. G. Ueltz, J. Am. Ceram. Soc., 6, 199, (1953); T. S. Shelvin and J. W. Lindenthal, Am. Ceram. Soc. Bull., 38, 10, 491, (1959); J. B. Wachtman and D. G. Lam, J. Am. Ceram. Soc., 42, 5, 254, (1959).

Card 2/3

Influence of degree ...

S/080/62/035/003/008/024  
D258/D302

SUBMITTED: March 28, 1961

Card 3/3

MASLENNIKOVA, G.N., kand. tekhn. nauk; KRASNOGOLOVYY, N.K., inzh.;  
BUCHENKOVA, A.F., inzh.

Study of the process of aging in high-voltage ceramic  
materials. Stek. i ker. 20 no.8:26-28 Ag '63.

(MIRA 16:11)

1. Gosudarstvennyy issledovatel'skiy elektrokeramicheskiy  
institut.

KRASNOGOLOVYY, N.K., inzh.; MASLENNIKOVA, G.N., kand.tekhn.nauk;  
SAKHAROV, S.S., inzh.; BUCHENKOVA, A.F., inzh.

Suspension insulators for overhead power transmission lines.  
Elektrotehnika 34 no.9:73-75 S '63. (MIRA 16:11)

MASLENNIKOVA, G.N.; BUCHENKOVA, A.F.

High voltage ceramic materials with increased electromechanical  
properties. Zhur. prikl. khim. 36 no.8:1654-1659 Ag '63.  
(MIRA 16:11)

BUDNIKOV, P.P., akademik (Moskva); MASLENNIKOVA, G. N. (Moskva)

Effect of quartz on the mechanical strength of electro-  
technical porcelain. Sklar a keramik 14 no. 3: 63-68  
Mr '64.

MASLENNIKOVA, G.N., doktor tekhn. nauk; LISOV, A.A.

Automatic recording of rheological curves for porcelain bodies.  
Stek. i ker. 22 no.7:24-27 J1 '65. (MIRA 18:9)

1. Moskovskiy inzhenerno-ekonomicheskii institut imeni Ordzhonikidze.



LISOV, A.A.; MASLENNIKOVA, G.N., doktor tekhn.nauk

Elastic, plastic, and viscous properties of porcelain batches.

Stek. i ker. 23 no.1:32-34 Ja '66.

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1. Moskovskiy inzhenerno-ekonomicheskoy institut imeni  
Ordzhonikidze.

IVANOV, V.I., inzh.; STOYANCHENKO, S.I., inzh.; SUMTSOV, V.F., inzh.;  
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MASLENNIKOVA, I. M.,

"Experimental Determination of Heat Radiation Properties  
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1. Iz kafedry rentgenologii (zav. - prof. B.M.Shtern) Lenin-  
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SHUPOV, L.P.; BELONozhko, I.F.; GISHCHUK, B.V.; KONONOVA, A.P.; MASLENNIKOVA,  
K.P.; SVERDEL', E.I.; ARTEMOVA, A.A.

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1. Nauchno-issledovatel'skiy i proyektnyy institut po obogash-  
cheniyu i aglomeratsii rud chernykh metallov, Krivoy Rog (for  
Shupov, Belonozhko, Gishchuk). 2. Ukrainskiy nauchno-issledovatel'-  
skiy institut po pererabotke iskusstvennogo i sinteticheskogo  
volokna (for Kononova, Maslennikova). 3. Yuzhnyy gorno-obogatitel'-  
nyy kombinat, Krivoy Rog (for Sverdel', Artemova).

MASLENNIKOVA, L.D.

Interdependence of the motor function of the intestine and the gradient of its nerve elements. Biul. eksp. biol. i med. 52 no.8:117-123 Ag '61.  
(MIRA 15:1)

1. Iz kafedry normal'noy anatomii (zav. - prof. Ye.P.Mel'man)  
Stanislavskogo meditsinskogo instituta (dir. - dotsent G.A.Babenko).  
Predstavlena akademikom V.N.Chernigovskim.  
(INTESTINES--INNERVATION)

MEL'MAN, Ye.P.; DOLISHNIY, N.V.; MASLENNIKOVA, L.D.; Prinsipal uchastiye  
ATAMANIUK, M.Yu., student

Interrelation between the structural characteristics, the  
gradient of intraorganic neural elements along the intestinal  
tube and its motor functions. Arkh. anat., gist. i embr. 43  
no.8:53-63 Ag 1962. (MIRA 17:8)

1. Kafedra normal'noy anatomii (zav. -- prof. Ye.P. Mel'man)  
Stanislavskogo meditsinskogo instituta.



9-3  
PHASE I BOOK EXPLOITATION

SOV/984

International symposium on macromolecular chemistry. Moscow, 1960.

Reshchunardnyy sbornik po makromolekulyarnoy khimii SSSR, Moskva, 14-18 Iyunya 1960 g.; doklady i avtoreferaty. Seriya III. (International Symposium on Macromolecular Chemistry Held in Moscow, June 14-18, 1960; Papers and Summaries) Section III. [Moscow, Izd-vo AN SSSR, 1960] 469 p. 55,000 copies printed.

Rech. M.: P. S. Koshina.

Sponsoring Agency: The International Union of Pure and Applied Chemistry. Commission on Macromolecular Chemistry.

PURPOSE: This book is intended for chemists interested in polymerization reactions and the synthesis of high molecular compounds.

COVER: This is Section III of a multivolume work containing papers on macromolecular chemistry. The articles in general deal with the kinetics of polymerization reactions, the synthesis of special-purpose polymers, e.g., ion exchange resins, semiconductor materials, etc., methods of analyzing polymerization reactions, properties and chemical interactions of high molecular materials, and the effects of various factors on polymerization and the degradation of high molecular compounds. No personalities are mentioned. References given follow the articles.

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Specific prevention of mumps. Report No.2: Studying the safety and immunogenicity of living attenuated mumps vaccine in intradermal immunisation of children [with summary in English] Vop. virus, 2 no.1:13-17 Ja-F '57 (MLRA 10:5)

1. Otdel virusologii Instituta epidemiologii, mikrobiologii i gigiyeny imeni Pastera, Leningrad.

(MUMPS, prev. & control

safety & immunogenicity of living attenuated vaccine by intradermal immun. in child) (Rus)

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1. Virusologicheskaya laboratoriya Instituta imeni Pastera i Nauchno-issledovatel'skiy pediatricheskiy institut Ministerstva zdravookhraneniya RSFSR, Leningrad.

(MUMPS, prevention & control  
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1. Virusologicheskaya laboratoriya Instituta imeni Pastera,  
Leningrad.

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skin reaction to mumps allergen (Rus))

(ALLERGY,

skin reaction to mumps allergen, evaluation as mumps  
diag. test (Rus))

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Etiology of influenzalike diseases; preliminary report. Trudy  
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instituta epidemiologii, mikrobiologii i gigiyeny imeni Pastera.  
(ADENOVIRUS INFECTIONS)

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1. Institut epidemiologii, mikrobiologii i gigiyeny imeni Pastera,  
i 39-ya poliklinika Leningrada.

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1. Iz laboratorii gruppy (rukovoditel' E.A. Fridman) Leningradskogo instituta epidemiologii, mikrobiologii i gigieny imeni Pastera i Leningradskoy gorodskoy sanitarno-epidemiologicheskoy stantsii (glavnyy vrash N.G. Grigor'yeva).

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MASLENNIKOVA, L.K., KLUSHINA, T.A.

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BUROV, S. A., mayor meditsinskoy slushby, kand. med. nauk;  
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nauk; MASLENNIKOVA, L. K., kand. med. nauk

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Characteristics of group adenovirus diseases among children. Sov.  
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1. Iz laboratorii grippa (zav. E.A.Fridman) sektora epidemiologii  
(zav. I.M.Ansheles [deceased]) Instituta epidemiologii i mikrobiologii  
imeni Pastera i Leningradskoy gorodskoy sanitarno-epidemiologicheskoy  
stantsii (glavnyy vrach N.G.Grigor'yeva).  
(ADENOVIRUS INFECTIONS)

MASLENNIKOVA, L.K.; KLUSHINA, T.A.; SAPOZHNIKOVA, V.A.

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(ADENOVIRUS INFECTIONS) (CHILDREN--DISEASES)

GUSARSKAYA, I.L., kand.med.nauk; MASLENNIKOVA, L.K., kand.med.nauk;  
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Clinical characteristics of epidemic outbreaks of adenovirus  
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1. Iz Leningradskogo nauchno-issledovatel'skogo instituta detskikh  
infektsiy (dir. - prof. A.L. Libov) Instituta epidemiologii i  
mikrobiologii imeni Pastera (dir. M.Ya. Nikitin) i Leningradskoy  
gorodskoy sanitarno-epidemiologicheskoy stantsii (glavnyy vrach  
V.N. Kovshilo).

(ADENOVIRUS INFECTIONS)

GUSARSKAYA, I.L., kand.med.nauk; DUDKINA, K.A.; MASLENNIKOVA, L.K., kand.  
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Vop.okh.mat.i det. 7 no.4:6-10 Ap '62. (MIRA 15:11)

1. Iz Gosudarstvennogo nauchno-issledovatel'skogo instituta  
detskikh infektsiy (dir. - prof. A.L.Libov), Detskoy infektsionnoy  
bol'nitsy Leninskogo rayona (glavnyy vrach K.A.Dudkina), Leningrad-  
skogo nauchno-issledovatel'skogo instituta epidemiologii i  
mikrobiologii imeni Pastera (dir. - prof. V.G.Nikitina) i Gorodskoy  
sanitarno-epidemiologicheskoy stantsii Leningrada (glavnyy vrach  
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(ADENOVIRUS INFECTIONS)

TSINTSERLING, A.V.; POLONSKAYA, Ye.V.; TARASOVA, A.P.; LYUBAVIN, A.R.;  
NABOKOVA, Ye.R.; MASLENNIKOVA, L.K.; MAYOROVA, L.P. (Leningrad)

Pathological anatomy of adenovirus lesions of the lungs in children.  
Ark. pat. 27 no.10:21-28 '65. (MIRA 18:10)

1. Institut detskikh infektsiy i Institut imeni Pastera, Detskaya  
bol'nitsa imeni N.F.Filatova, Detskaya bol'nitsa imeni Simbalina  
i 1-ya detskaya bol'nitsa Oktyabr'skogo rayona, Leningrad.



MASLENNIKOVA, L.K.; MAYOROVA, L.P.; KLUSHINA, T.A.

Methods and results of the study of adenovirus diseases in  
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210-219 \*62 (MIRA 19:1)

1. Iz laboratorii grippe Leningradskogo instituta epidemiologii  
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YEVDOKIMOV, S.A.; ISAACKYAN, L.A.; MASLENNIKOVA, L.S.

Electrometric method for determining the oxygen concentration in the expired air of small animals. Fiziol. zh. SSSR Sechenov 49 no.6:767-770 '63 (MIRA 17:1)

1. From the Unit for Gas- and Thermal exchange Physiology, Pavlov Institute of Physiology, Leningrad.

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AUTHOR: Isaakyan, L. A.; Rozhayya, D. A.; Maslennikova, L. S.

ORG: Group on the Physiology of Gas Exchange, Ecophysiology Laboratory, Institute of Physiology im. I. P. Pavlov, AN SSSR, Leningrad (Gruppa fiziologii gazoobmena laboratorii ekologicheskoy fiziologii Instituta fiziologii AN SSSR)

TITLE: Species-specific characteristics of heat production in rodents following hypothermia

SOURCE: Zhurnal evolyutsionnoy biokhimii i fiziologii, v. 1, no. 5, 1965, 419-424

TOPIC TAGS: animal physiology, hypothermia, thermogenesis, rat, mouse, hamster

ABSTRACT: The thermogenetic capacity was investigated in some rodent species while warming up after hypothermia. White rats (*Rattus norvegicus* Berkenh.), white mice (*Mus. musculus* L.), golden hamsters (*Mesocricetus auratus* Wath.), and field mice (*Stenocranius gregalis* Pall.) were used. Hypothermia was induced by a combination of hypercapnia and cooling. The oxygen consumption of animals, determined in an exsiccator, was used as an index of their heat production. It was found that the comparative thermogenetic characteristics of these animals during lethargic hypothermia (defined as a body temperature of 16-20C) and during spontaneous reanimation correspond to species-specific characteristics under normal heat conditions. Recovery of body temperature in all four species occurs in a similar manner, but with dif-

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ferent energy expenditures. Golden hamsters (hibernators) demonstrated higher rates of heat production, more pronounced shivering, and greater resistance to cooling than other species. The capacity of a species for spontaneous reanimation is only partly determined by the depth of hypothermia and the temperature of the surroundings. Experimental results showed that white rats and mice with a body temperature of 19C cannot revive spontaneously; however, hamsters and field mice with an even lower body temperature (15C) can revive themselves. Orig. art. has: 4 figures and 1 table.

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